

first game having a first number of reels and a second game having a second number of reels.

[0014] These and other features and advantages of the invention will be described in more detail below with reference to the associated figures.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] FIG. 1A is a perspective view of a gaming machine in accordance with one embodiment of the present invention.

[0016] FIG. 1B shows a display device arrangement suitable for use with a gaming machine in accordance with another embodiment of the present invention.

[0017] FIG. 1C is an exploded perspective view of a display device arrangement in accordance with another embodiment of the present invention.

[0018] FIGS. 2A and 2B illustrates one game example where curved display device outputs a video reel image in accordance with a specific embodiment of the present invention.

[0019] FIG. 3 shows exemplary video output that may be shown on the display system of FIG. 1C during performance of a slots routine using reels display on the curved display device in accordance with another specific embodiment of the present invention.

[0020] FIG. 4 shows exemplary video output shown on the display system of FIG. 1C when the light valve has been activated to obscure the images on rear display device.

[0021] FIGS. 5A-5D show exemplary video data output on the display devices and gaming machine of FIG. 1A.

[0022] FIG. 6A is a perspective view of a gaming machine in accordance with one embodiment of the present invention.

[0023] FIG. 6B shows a display device arrangement in accordance with another embodiment of the present invention.

[0024] FIG. 7 illustrates a control configuration for use in a gaming machine in accordance with another specific embodiment of the present invention.

[0025] FIG. 8 is flowchart or software routine of a display routine that may be executed by a gaming machine controller in accordance with a specific embodiment of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0026] The present invention will now be described in detail with reference to a few preferred embodiments thereof as illustrated in the accompanying drawings. In the following description, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It will be apparent, however, to one skilled in the art, that the present invention may be practiced without some or all of these specific details. In other instances, well known process steps and/or structures have not been described in detail in order to not unnecessarily obscure the present invention.

[0027] The present invention includes a gaming machine with multiple display devices arranged in a common line of sight relative to a person near the gaming machine. Multiple display devices disposed along a common line of sight are also referred to herein as 'layered' displays. One or more of the layered display devices proximate to the person are completely or partially transparent or translucent so as to permit view of the distal display devices.

[0028] The distal display may include a curved display device, such as a curved OLED or a projection system that casts an image onto a curved surface. These curved display devices are suitable for mimicking a conventional mechanical reel game, but allow the digital and external control of reel games on the curved digital display. Glass LCDs may be curved and are also suitable for use.

[0029] This multi-layer display device arrangement improves visual output for a gaming machine. As will be described below, display device arrangements described herein permit better graphics for a game played on a gaming machine, more games to be played on a single gaming machine, and/or dynamic reconfiguration of a gaming machine to offer multiple games that traditionally required manual and mechanical reconfiguration of a gaming machine, e.g., to change the number of reels for new reel game that requires five reels instead of three.

[0030] In one embodiment, all three display devices are digital and permit reconfiguration in real time. This permits new or different games to be downloaded onto a gaming machine, and reconfiguration of the three display devices to present a new or different game using any combination of the three display devices. For a casino, or other gaming establishment, this permits a single gaming machine to offer multiple games without the need for gaming machine maintenance or replacement when a new game is desired by casino management or customer demand.

[0031] Controlling transparency of the outer one or two display devices also provides novel game presentation versatility on a single gaming machine. In one embodiment, the intermediate display device acts as a light valve that controls whether the interior display device is visible, or what portions of the interior display device are visible. For example, window portions of the intermediate light valve may be left transparent to permit viewing of a select number video reels disposed on a curved OLED display device arranged behind the light valve. Since the number (and size) of video reels on the curved OLED display device may be digitally changed, e.g., from 3 video reels to 5 to 7 etc., controlling opacity of the intermediate light valve permits the gaming machine to visually offer multiple reel games with a different number of reels on a single gaming machine—without maintenance resources and casino downtime to change mechanical reels.

[0032] In another embodiment, the intermediate light valve completely blocks out the interior display device, where the outermost display device is now solely visible and used for game presentation. The gaming machine now resembles a conventional gaming machine that only includes a single and outer LCD panel. The gaming machine may then respond to digital controls to switch between a reel game, a multi-layer/multi-display game, and a simple one-panel LCD game. Other uses of the layered displays are possible and contemplated.